

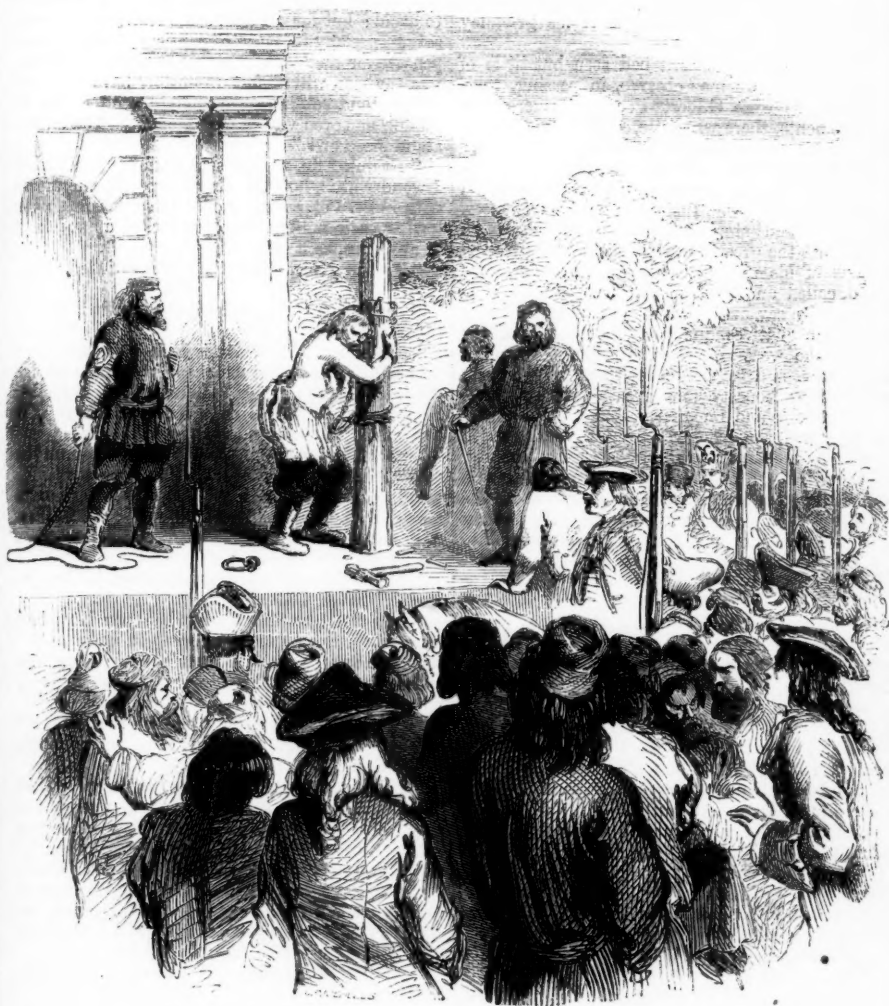
THE LEISURE HOUR.

A FAMILY JOURNAL OF INSTRUCTION AND RECREATION.

No. 213.

THURSDAY, JANUARY 24, 1856.

PRICE 1d.
STAMPED, 2d.



PREPARATIONS FOR THE INFLECTION OF THE KNOT.

THE ENGLISHMAN IN RUSSIA.

A TALE OF THE TIME OF CATHERINE II.

CHAPTER VII.—THE KNOT.

TIME passes smoothly and rapidly with the happy and prosperous. Clifford had been several weeks

No. 213, 1856.

in St. Petersburg, and had been introduced to the select circle of his uncle's friends of the English Factory: he had also extended his acquaintance with the city; sometimes seated, in company with the merchant himself, in a comfortable carriage;

E

sometimes perched in, or upon, a droshki—a vehicle of peculiar construction, which may hereafter be described; and at other times, in an evening stroll with Alexey Ivanoff, in whose unhappy history our young traveller had become increasingly interested.

Clifford had also visited the young serf in his own mean lodgings, and had seen, with much astonishment, some of his works of genius. The young painter had by this time returned, though unwillingly, to the great work of which Gilbert Penrhyn had spoken—an altar-piece for a Greek church; and in this occupation he so far found relief, as that the remembrance of his grief lay smothered in his own bosom.

In all this time, Clifford had seen but little of business; and we may observe, in passing, that, extensive as were Gilbert Penrhyn's mercantile engagements, there was little, either in his habitation or his establishment, obviously to show that he was a merchant. At any rate, there was none of the bustle and confusion which Clifford had expected to witness. Instead of vast warehouses, and a numerous staff of counting-house clerks, he found that the greater part of the business transactions of his uncle were committed to a native guild, called an *Artel*, of which institution it is sufficient to say here, that it was composed of a number of natives, many of them serfs of the crown, who were virtually the factors of foreign merchants, and transacted for them, with almost undeviating honesty and great assiduity, their most intricate and important affairs. The *Artel*, in fact, was the machinery which, when put in motion by the master hand, or rather master head, of the merchant, and kept oiled, of course, with a sufficient amount of profit, relieved him of all the drudgery of business; superintending the loading and unloading of cargoes, receiving these into its own warehouses, and becoming the medium through which money was paid and received.

Thus, the merchants of St. Petersburg were left with much leisure time on their hands, which they employed according to their tastes; and, with many of them, these tastes were sufficiently luxurious.

In fact, the emotions of wonder which Penrhyn Clifford had felt at the first sight of his uncle's residence, were increased when he witnessed the profusion of wealth, in many instances, lavished in the internal embellishment of those of other English merchants in the city.

Clifford one day expressed his surprise and admiration to his uncle.

"It is not difficult to understand," said the merchant. "Wealth naturally leads to indulgence in luxurious habits; and our English merchants here are in general wealthy and prosperous."

"The better for them, dear uncle."

"That is as it may be, Pen. I need not tell you that wealth has its duties and responsibilities, as well as its advantages; and that, where much is given, much will be required. But I did not mean to moralize; and there is perhaps another way of accounting for the degree of self-indulgence you have noticed."

"What way is that, uncle?" asked Penrhyn.

"Why, you cannot but have seen that, though, on the whole, our community here is happily un-

molested, yet there is a degree of constraint cast over us, owing to the circumstances in which we are placed."

"True," said the nephew; "some of our people seem almost afraid of the sound of their own voices, and, in giving utterance to the most commonplace remark, involuntarily look over their shoulders, as though conscience-convicted of intended treason. I am afraid, uncle, that I shall never acquire such excessive prudence."

"You will not need, Penrhyn. In fact, an over degree of caution defeats its own object, by drawing upon one the observation which it is intended to avoid; but for all this, some restraint is necessary, especially in matters political; and, to compensate for the loss of natural or political liberty, wealthy men will almost insensibly have recourse to show and self-indulgence, and too often also to trifling and even vicious amusements. You understand me, Pen?"

"I think I do, uncle," said Clifford; "but what I wonder at is, how the English people one meets with in St. Petersburg should be so satisfied with having their national freedom locked up and kept in abeyance, as it is."

"Are you sure that they are satisfied, Penrhyn?"

"They seem to be; at least they are in no hurry to leave Russia."

"The pursuit of wealth is both fascinating and enthralling," said the merchant, "and the desire for it is rarely satisfied. Like the horse-leech's daughters, it cries, 'Give, give!' The man who has gained his thousands by the successful speculations of last year, is tempted to continue or renew those speculations another year; and he who has been less fortunate, thinks it necessary to redouble his exertions, to make up for his losses. And so we go on till age and habit render us indifferent to change."

"You say 'we' are you indifferent to change, uncle?" asked Clifford.

"Put this question to me when you have had enough of Russia, and I will give you my answer," replied the merchant. "And this reminds me," he added, "that I cannot accompany you to-day, as I promised; I shall be engaged all the morning."

"Cannot I stay at home and assist you, uncle?" said the young man. "I have been long enough idle, I think."

"Time enough yet, when you have seen all that is to be seen in St. Petersburg, Pen," replied the merchant; "which will not be before we take our journey to Makarief. The time is coming on for that: meanwhile, you will do well to look about you. We are to have a guest to-day," Gilbert Penrhyn added, as his nephew was preparing to depart; "so if you meet with any of our English friends, don't let them run off with you."

"I will take care, sir. Is the guest a fellow-countryman?"

"Yes, and an extraordinary man. You have never seen him; but you have heard of him. I will not say who he is, however, till you meet."

Soon after this, they separated: and Clifford, after leaving his uncle's house, made his way towards a favourite promenade of his, namely, the Admiralty Square. Here, he observed—unusual occurrence in any part of St. Petersburg—a

crowd rapidly collecting. Curiosity prompted him to plunge into the concourse; and he presently found himself so hemmed in that he was unable to retreat from a scene which, most assuredly, he had no particular desire to witness.

The scene was this.

Within a circle, formed by a number of soldiers under arms, some mounted and some on foot, was a stout moveable post; and to this post was fastened a man, stripped to the waist. By his side stood an athletic fellow, carelessly holding in his hand an instrument which the young traveller had no difficulty in recognising as *THE KNOT*.

The punishment had not yet begun; and the culprit looked around him. His was a countenance which, once seen, and under such circumstances, would not soon be forgotten. His forehead, which was high and broad, but retreating, was overhung by a mass of matted red hair, and a thick beard and moustaches of the same colour hid the lower part of his face, and hung low upon his swarthy naked breast. He had high cheekbones, and a bronzed complexion; his eyes, naturally small and deep set, were sheltered by a thicket of projecting eyebrows, which met low down on the bridge of his nose, without any apparent break or separation. But, hidden as were the small eyes, they sparkled like diamonds in their caves, and shot forth gleams of vindictive hate, as if in reply to the murmurs of the spectators; though, whether those murmurs expressed sympathy with the victim, or complacency with his doom, Clifford could not judge.

He had but little time for speculation. An unearthly laugh of defiance from the unhappy wretch, was suddenly changed into a yell of mortal agony when the first stroke descended, burying, as it seemed, the hard thong of the fearful scourge in the lacerated, quivering flesh, and followed, when withdrawn, by a copious stream of blood.

Again and again the executioner, with the adroitness of long practice, and the indifference which familiarity with suffering engenders, or rather, as Clifford fancied, with brutal exultation and pride in his horrid skill, renewed his strokes until the ground around was sodden with gore, and the first piercing shrieks, groanings, and cries for mercy of the tortured man, had subsided into convulsive moans, and every fibre of his body appeared to be broken up and destroyed.

How long the murderous punishment was continued, Clifford could not tell; for, we trust it will not greatly detract from our reader's estimate of his heroism when we say that a deadly sickness, in spite of his efforts, crept over him; and he would have sunk to the ground but for a strong arm which at that moment was thrown around him, while a filmy mist was spread before his eyes.

On partially recovering from his swoon, the infliction had ceased, and the victim was stretched on the ground, apparently lifeless.

Looking around him, Penrhyn Clifford perceived that the crowd was slowly dispersing—for the sight was over—and then, for the first time, he was conscious of being indebted to a stranger for support.

"You are not accustomed to such scenes," said the Unknown, in an English voice, which caused our young traveller to turn suddenly on the

speaker, and, for the moment, interrupted the acknowledgment of kindness he was about to offer.

The stranger was a man past middle age, neatly dressed, and in a costume which—apart from his tongue—would have marked him, not only as a fellow-countryman, but as a gentleman. His countenance was striking and indicative of firmness, and yet, withal, of so much benevolence and humanity that he would scarcely have been expected to be a spectator from choice, on an occasion like the present. And yet, from choice he was there.

"No, thank God!" exclaimed Penrhyn, fervently though faintly, "I am *not* accustomed to such scenes; and I have no wish to witness another like this."

"It is well to thank our Creator and Preserver for all his mercies, and not as among the least, for a merciful heart," rejoined the English stranger, quietly: "but, excuse me: can you stand without assistance for a moment?"

Penrhyn believed that he could.

"I will leave you for a short space, then: do not move from this spot, however; for I see you are not yet quite recovered: I will soon return;" and, without waiting for a reply, the stranger pushed in among the soldiers, who were about removing the torn and still slowly bleeding body of the criminal. Over this—without meeting any opposition from these attendants—the stranger bent with apparent interest. He took the cold, clammy hand in his own, and laid his fore-finger on its wrist. Then, after a close, though momentary inspection of the ghastly wounds caused by the knot, he slowly withdrew, and, to our young hero's unbounded astonishment and disgust, approached the executioner, entered into conversation with him, and, taking into his own hand the instrument of torture, examined it—dripping as it was with human blood—with cool deliberation.

Clifford did not wait to see more, nor to hold further communication with the stranger, whom he set down in his thoughts as a cold-blooded, inquisitive monster. A movement among the few spectators who remained favoured his retreat, and he hastened, though staggeringly, from the spot, without once looking behind him.

Reaching his uncle's house, he shut himself up in his chamber; and it was not until twice summoned, that, two or three hours later in the day, he entered the dining-room.

CHAPTER VIII.

THE VISITOR.

CLIFFORD's embarrassment may be more easily imagined than expressed, when, in the guest at his uncle's table, he recognised the stranger from whose further acquaintance he had hastily retreated at the close of his morning's adventure. And his embarrassment was the greater that, in the beaming countenance of the hospitable merchant, he could read, at the first glance, that he considered himself honoured by the visit, and delighted with the guest.

The stranger's quick eye noted Clifford's confusion, and he probably guessed at its cause; for, without waiting for a formal introduction, he rose and offered his hand, saying, as the youth ceremoniously and coldly acknowledged the courtesy:—

"So, young gentleman, you did not know what to think of me this morning, and therefore shunned my intimacy?" He smiled pleasantly as he spoke, however.

"Very strange! There must be some mistake," thought Clifford; but he did not say so. "I felt better," he stammered, "and able to walk without assistance, and had no occasion to tax your further kindness, sir. Allow me to thank you now for your attention," he added.

"So, so; you have met Mr. Howard before, Pen?" said the merchant; "and I need not, perhaps, introduce——"

"Mr. Howard!" exclaimed the young man with a start of astonishment, which increased his confusion and completed the entanglement of his ideas. "Not Mr. Howard the—the philan—Mr. Howard, I mean, of whom you were speaking——"

"Simply, John Howard of Cardington in Bedfordshire," said the stranger, gravely but kindly. "And this young gentleman is your son, I presume, Mr. Penrhyn."

"No sir, no, no: not my son, but as dear to me as a son: my dear and dead only sister's only son, Penrhyn Clifford by name, sir," said the merchant, laying his hand affectionately on his nephew's shoulder.

"You have no son, then, Mr. Penrhyn?" said the philanthropist—(we may complete the word, which had only half escaped our hero's lips)—"you have no son, then?" he repeated; and a close observer might have detected a tremulous motion of the lip, and a shade of mental anguish passing over his countenance, for which, unless acquainted with Mr. Howard's domestic history, he would have been at a loss to account. It was but momentary, however; for no man living perhaps had greater power than Mr. Howard, of keeping under more than Spartan control the emotions of a heart overflowing with soft and tender affections.

"I have no son, surely," replied Gilbert Penrhyn; "I am a rugged old bachelor, Mr. Howard; but we will not speak of this. I am happy in my nephew, sir—happier than some fathers in their sons, I fear."

Again the transitory look of anguish. If Gilbert Penrhyn had known how, like a dagger, his unconscious words entered into the very soul of his guest, the words would never have been uttered.

The merchant had taken care to provide a rich and bountiful banquet; but, to his great concern, he could not prevail on Mr. Howard to partake of his luxuries.

"You do wrong, sir," said he, "to practise such rigid abstemiousness. Nothing but bread and vegetables, and fruit and milk!" he exclaimed, in reply to his guest's enumeration of the principal articles of his diet. "Why, sir, this is as bad as a monastic bill of fare; worse, if all stories be true. You will never have strength, Mr. Howard, with such weak assistances, and in our sullen climate, to carry out your noble design. You will sink under it, sir. Do permit me to reason you out of your prejudices, sir."

But the guest was obdurate. "I do not exhibit my practices as an example to the rest of the world," he said; "but I must myself adhere to them. In early youth, Mr. Penrhyn," he added, "I was rigorously confined to a spare diet, to ward

off threatening disease. By God's blessing, it succeeded; and I have never felt disposed to depart from the system thus commenced. And I may say that my simple fare has carried me through fatigues under which, many who think themselves better fortified might have sunk."

"It shall be as you please, assuredly," said the merchant; "but Penrhyn, my dear nephew, do you intend to follow Mr. Howard's example?"

It was not without cause that Clifford's affectionate relative asked this question; for, after many attempts to do justice to the good things before him, he had laid down his knife and fork, with his food almost untasted, while he himself sat in dreamy silence.

"I have lost my appetite for to-day, sir," he said, smiling faintly.

"I am afraid that the remembrance of the scene we both witnessed this morning still clings to you, Mr. Clifford," said the guest, kindly.

"It does indeed, sir. I seem to have before me now the ghastly and revolting spectacle; and the agonizing shrieks and awful moans of the poor wretch are still ringing in my ears," said Penrhyn Clifford; and he shuddered as he said it.

"What spectacle? and what wretch?" asked the merchant, looking alternately at his guest and his nephew.

He was told.

"Ah! I don't wonder, then, that your appetite is gone, Pen. It is a fearful punishment—barbarous and disgusting. It was a small boast of the czarina Elizabeth, that she had abolished capital punishments throughout her dominions, when she left this behind," said the merchant.

"A very small boast, and untrue likewise," said the guest; "for the executioner himself informs me that he not only *can* inflict the knout in such a manner as to cause death, but that he frequently has orders thus to inflict it."

"You have actually had intercourse with that functionary?" asked the host.

"Why, yes, sir, a day or two since. I took him by a *coup de main*, I believe; and not only obtained the information I wanted, but frightened him also. The fact is, I am determined to know all that is to be known, or I might as well have stayed in England, you know, sir. So, one morning—having found out where the man lived—I drove to his door and demanded an interview. The poor fellow was surprised, I have no doubt, to see any one like a gentleman in *his* house, and suspected that I was a government official in disguise. He trembled visibly; so I told him he had nothing to fear if he would answer my questions truly. He was ready enough to do this; and I left him fully convinced that death by cruel torture has been substituted for the more merciful form."

"I am the more convinced of this, by what I witnessed to-day," he added; "for it will be wonderful if the miserable wretch who was knouted this morning survives the punishment."

"What was his crime?" asked Clifford.

"I could not learn," replied Mr. Howard. "But now, Mr. Clifford," he added, with a peculiarly pensive smile, "confess that you were angry with my apparent insensibility to human suffering, and, what must have appeared to you, my mistimed and impertinent curiosity."

Penrhyn Clifford was not prepared for this home question, and he avoided a direct reply. "I am quite sure," he said, "that neither insensibility nor mere curiosity can be charged upon you, sir. But I fear, on the other hand, that I must have seemed to you to be effeminately sensitive."

"No, young gentleman, it did not seem so to me," rejoined the guest. "I should have thought ill of you if you had witnessed the sad spectacle unmoved. I only wondered how a young man of your appearance could have been present at all."

"It was accidental," said Clifford, earnestly.

"For myself," continued the guest, "I have seen so much of human misery as to have become, in some measure, physically hardened, perhaps, and to have obtained what surgeons would call *nerve*. But if I could think that my heart is becoming callous"—he said this with deep feeling—"I would abandon at once the pursuit to which I have long since dedicated my life, and think that my great Master had no longer anything for me to do on earth."

The conversation was interrupted at this point by the entrance of Barton, who, with a peculiarly long and lugubrious aspect, and in a low troubled voice, announced that a visitor waited below for Mr. Howard.

"A visitor! what sort of a visitor?" asked the merchant's guest.

"He has the look of a great man, sir," said Barton: "and," he added this in a tone little above a whisper, "he came in one of Prince Potemkin's carriages. I know this by the livery."

"And what then, my friend?" asked Mr. Howard, adding that he knew nothing of the prince.

"I am thinking, sir, that the visit may not be quite a pleasant one," stammered the man.

Gilbert Penrhyn seemed to think so too, for his countenance visibly fell. "Barton," he said, "has lived long enough in Russia to know that the velvet paws of the tiger conceal sharp talons. Is it not so, Barton?"

The man bowed.

"We shall soon see, at all events," rejoined the guest calmly, as he rose to follow the servant.

"Stop, sir," said the merchant, "if the business is anything in which my influence or purse can be of use, command them."

Mr. Howard bowed in his turn, and left the room.

"A noble-minded man, and as fearless as a lion,"

said Gilbert to his nephew. "I trust, though, that he has not brought upon himself the suspicions of the powers that be, by his free inquiries. It is a hazardous game to play with despotic governments; and Mr. Howard's *coup de main*, as he calls it, with the executioner, seems to me to have been injudicious, however praiseworthy."

"What is Mr. Howard's object in coming to Russia, sir?" asked Clifford.

"The same object which has led him at various times through the greater part of Europe: he has been visiting the prisons of Denmark and Sweden, and is now preparing to do the same here; not to indulge a morbid curiosity, however, but to devise and recommend means for the removal of abuses, the alleviation of misery, and the restoration of the abandoned. It is a godlike enterprise."

The merchant spoke warmly, and Clifford blushed as he remembered the hasty judgment he had that

morning formed of one whom only the loftiest heroism could have strengthened for the voluntary sacrifice of ease and comfort he had made, and the dangers he was continually incurring, in the pursuit of his great object of existence.

Mr. Howard soon returned.

"It is vexatious," he said, quietly resuming his seat.

"You have been ordered to leave the country within twenty-four hours, I suppose," said the merchant, "to teach you not to ask awkward questions in future. I feared it might have been something even worse than that."

"Nay, it is not so bad as that," the guest replied, with a sedate smile. "Your gracious mistress, the empress, invites—which I suppose means commands—me to appear at court. It is strange, for I left my carriage and horses at the last stage of the journey, and walked into the city unattended, to avoid recognition."

The merchant laughed heartily. "Our imperial mother hears and sees more than we are aware of," said he. "You had not been twelve hours in St. Petersburg before your name, your condition, the route by which you arrived, and your business in Russia, were all known by the chief of the police; and the palace and police court are in constant communication. But you will accept the invitation, or obey the command, of course."

"No, sir. I told the messenger—a great man he seems, as your servant said, and speaks French fluently—that I came to Russia to visit prisons, not palaces; and that all I ask of her majesty is to be allowed to prosecute my inquiries in peace."

"And the messenger—what said he to that?"

"He smiled graciously, and he says that the prison doors of the empire shall fly open at my approach. In other words, I am to have free access to them. I shall therefore visit the fortress to-morrow; for I do not wish them to get up a show, and cast dust in my eyes. Will you accompany me, sir?"

"Penrhyn will," said the merchant, "if you will accept his companionship. I see it in his looks. It will be a new experience to him, and will do him good."

And so it was arranged.

SPONTANEOUS COMBUSTION.

How frequently do we read in the newspapers of the outbreak of conflagrations, more or less devastating in their character, to which it is difficult to assign an adequate origin. Some of these may doubtless be attributed to spontaneous combustion—meaning by that term a conflagration occasioned by the contact of substances which, innocuous in their normal condition, become fraught with danger when brought into collision. A few notes upon this curious subject will be interesting.

Cotton which has been wetted with oil speedily takes fire. It is well known how difficult, almost impossible, it is to prevent the escape of oil from casks; and yet, the slightest quantity of this liquid issuing from between the staves upon cotton may produce combustion. Upon this point the following occurrence is to be found in the "Philosophical Transactions."

"Mr. Golding, an official of the East India Company, had left a bottle containing oil upon a table in the arsenal, beside a chest filled with coarse cottons. The bottle was overturned in the night, probably by rats; it broke upon the lid of the chest and the oil penetrated the cottons. When the chest was opened upon the ensuing morning, the cottons were found burning and partially consumed, while the chest itself was upon the point of bursting into flames. In his first alarm Mr. Golding imagined that an attempt had been made to set the arsenal on fire; but as no traces of inflammable materials were found, after the strictest search in the vicinity of the chest, he communicated the matter to Mr. Humphries, a brother official. This gentleman had studied chemical works, among others that of Hopson, in which various cases of spontaneous combustion were detailed. Struck by the similarity of the occurrence which had just taken place, to some of those of which he had read, he determined upon essaying an experiment.

"For this purpose he moistened a piece of cotton, of a similar description to that which had been burnt, with linseed oil, and placed it in a small box, which he then locked. Three hours after, the box began to smoke, and upon being opened the cotton was discovered in precisely the same condition as Mr. Golding had found the contents of his chest."

In 1781, some Russian ships at Cronstadt, upon which it was well known no fires had been lighted for five years, suddenly burst into flames, without ostensible cause. The Empress gave orders to the Academy at St. Petersburg to institute inquiries and experiments upon the subject, and it appeared that the soot proceeding from vegetable substances—that is to say, pine-tree soot, and such as proceeds from trees containing resin—when wetted with hemp-oil, is liable to spontaneous combustion, which is not the case with soot arising from animal substances. The fearful conflagration of the large rope-magazine at St. Petersburg, as well as a fire at the dockyard of Rochfort, in 1756, were ascribed to similar causes. In 1757, the sail-magazine at Brest was entirely consumed in consequence of heaping waxed cloths upon one another, which had been painted upon one side and dried in the sun. Authentic reports of experiments instituted to discover the cause, ascribe this calamity to spontaneous combustion. Saladin and Carotte have demonstrated that vegetable stuffs, boiled in oil or grease, and even some time afterwards placed upon one another, burst into flames upon the admission of air; and it is very remarkable that the same substances, if they were damp before being placed in oil, speedily consume, while they smoulder away into ashes without flaming if previously well dried.

Papermakers know that the heaps of rags which lie piled up in their factories, would speedily break out into spontaneous combustion if precautionary measures against their becoming unduly heated were not adopted in proper time. The danger of damp or wet hay kindling is a matter with which no farmer is unacquainted. Wheat also occasionally becomes inflammable, but far less frequently than hay, owing to its being seldom stacked in so damp a condition, as well as to greater care being

exercised. Tobacco leaves in casks will likewise become heated at times.

Count Marozzo relates a case of spontaneous combustion, accompanied by an explosion, which took place in a flour magazine at Turin. This was ascribed to a quantity of flour dust, which, in consequence of the removal of some of the sacks, was floating in the air, having caught fire at the flame of an open lantern, and having thus communicated with the remaining contents of the magazine; but the cause of the conflagration was never accurately ascertained.

Frequent instances have been known of the spontaneous combustion of wools, particularly of those still in the grease; pieces of cloth in a greasy condition have also been seen to burst out into flames without apparent cause. Occurrences of this description, however, have only been observed to take place when the superincumbent substances possessed a certain amount of dampness, the decomposition of the water by the increased temperature occasioned by fermentation feeding the conflagration. From this may be seen how careful one should be in heaping bales of wool, which frequently arrive in a damp condition, one upon the other, and how necessary to their preservation it is that they should be thoroughly dried before being placed in store. Cotton and oil should always be carefully separated; the former should never be preserved in cellars, from their liability to impart dampness, occasioning the very danger it is desired to avoid. Wool and cotton smoulder, as long as no free current of air is admitted; when this takes place they burst into flames.

It is unnecessary to enter upon the many other cases in which spontaneous combustion may occur. Its causes are extremely diverse, tending more or less to the same conclusion—that the utmost care should be observed in magazines which contain inflammable substances. These should never be stored in large quantities, especially when in a damp or wet condition; they should be frequently examined, and measures of precaution adopted if the slightest tendency to heat be manifested, for the least delay may lead to conflagration. If the examination is undertaken at night, it should not be by the light of a naked flame, as the gases which these substances develop are frequently kindled by the contact.

A BRACE OF GROUSE.

THROUGHOUT the whole of winter, the shop of the London poulterer presents a Landseerian tableau, composed of groups of furred and feathered game, including water fowl. Here hang rows of hares and leverets; there, too, are rabbits of the warren and also of the hutch, in files of long perspective. Festoons of birds are intermixed, or so arranged as to attract the eye. Groups of golden plovers and lapwings, of woodcocks and snipes, are contrasted with partridges and pheasants; here and there a whimbrel, or a curlew, or a long-necked, spear-beaked heron, with flagging, motionless wings, and sometimes even a bittern, arrests the eye of the most incurious passerger. To these we may add the knot, the god-

wit, the dunlir, and others of the grallatorial or stilt-walking order, as occasional objects of exhibition.

Numerous, too, are the water-fowl. Not unfrequently is the noble wild swan exposed to sight—fit subject for the artist's pencil. The bean goose, the bernicle goose, and the brent goose, are far from being rare; while the wild duck, the shoveller, the wigeon, the teal, the pintail, and the pochard, are always common, sometimes abundant.

But attractive as are the water fowl, still more so are the birds of the mountain, the moorland, and the pine forest, generally included under the name of grouse. There hangs the magnificent capercaillie (*Tetrao urogallus*), there the bonny black cock (*Tetrao tetrix*), there the red grouse (*Tetrao Scoticus*), there the Scottish ptarmigan (*Tetrao mutus*), and there, in multitudes, the common Norwegian ptarmigan (*Tetrao saliceti*), of which tens of thousands are exported every winter from Norway and Sweden into the London markets.

What a scene, towards the end of December, does Leadenhall Market present! If our reader could form something like a conception of the multitude of game and wild fowl sent from all parts to the metropolis, let him visit this great emporium early on some bright frosty morning, as soon as business commences. The sight will not disappoint his highest expectations, and often will a rare bird excite his interest.

It is to the grouse in particular that we would on the present occasion invite attention. Common as grouse of different species are—now to be seen in the poulterers' shops throughout the metropolis—there was a time, and that not many years ago, in which they were *rara aves*—to be seen occasionally, but never in such multitudes as they are in the present day. The railroad, the steamboat, and legal alterations with regard to the sale of game, have operated conjointly so as to facilitate and encourage its introduction as a marketable commodity, not only into the metropolis, but into our cities and larger towns generally. Thirty years ago, the red grouse and the black grouse were strange birds in London. They were received from the north as valuable presents, and not to be displayed at table under ordinary circumstances, but were reserved to grace a feast. The times have changed, and grouse may be purchased every day in the market or at the poulterer's, and are no longer rarities. This, perhaps, is all for the best; but, speaking for ourselves, we miss our regularly-expected hamper of game, more acceptable by far than the cheapest lot which we could purchase at Leadenhall Market. If our reader has ever unpacked a hamper from the moorlands of the north, he will enter into our feelings.

A group of grouse is before us. The moor-game, or red grouse, first claims our notice. According to the opinion of ornithologists generally, the red grouse is confined exclusively to the British Islands; it is a native of the wild moorland districts, not only of Scotland, where it is very abundant, but also of the northern and midland counties of England, Northumberland, Durham, Cumberland, Yorkshire, Lancashire, Derbyshire, etc., as well as in those of North Wales. It is extensively spread over the hills and mountains

of Ireland, and is, moreover, common in the Hebrides, and also in the Orkney Islands—a circumstance which might almost lead us to pause before receiving with entire credence the assertion that the species does not inhabit either Norway or Sweden.

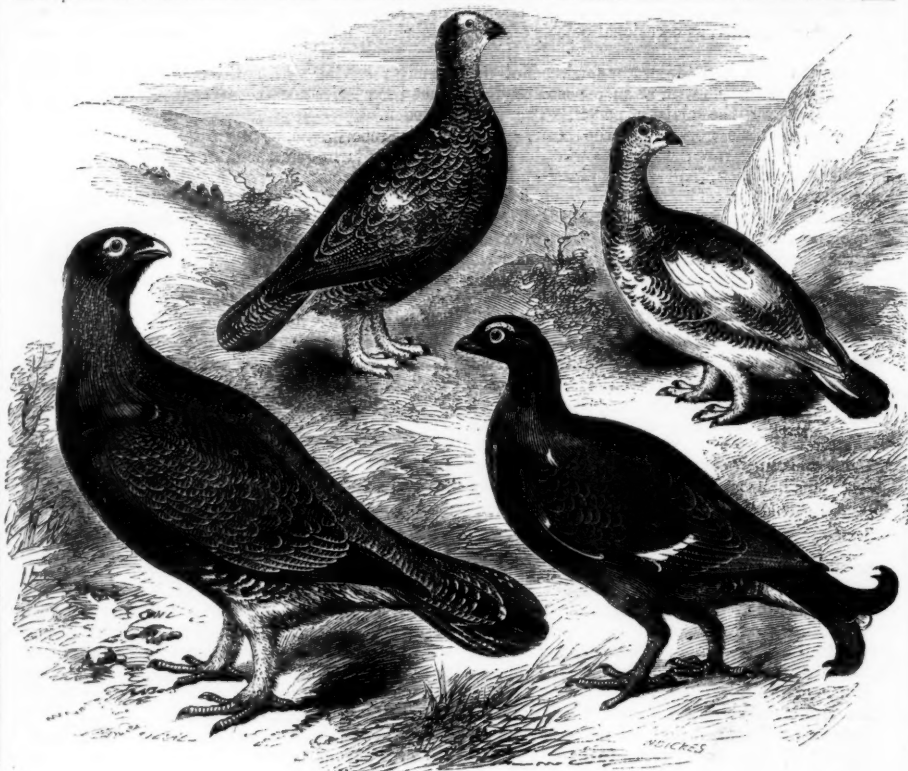
The moor-game, or red grouse, does not affect, like the ptarmigan, the sterile rocky pinnacles of the bold mountain range, where in clefts and ravines the winter snow melts not till July; but contents itself with a lower elevation, where the heath-land stretches far into the distance, now swelling into massive crests, now sinking into winding valleys, glens, and ravines, and again sweeping up the sides of the mist-clad declivity to the very border line of summer snow and almost alpine barrenness. From this altitude it ranges to the corn lands reclaimed from the moor, and often have we received grouse, the crops of which have been filled with oats or rye. As a rule, it may be said that where, over extensive hilly moorlands, the ling or heather prevails, interrupted by wide patches of the bilberry, the red whortleberry, and the cranberry, there, unless driven from its asylum, the red grouse will be found in more or less abundance.

Like gallinaceous birds in general, the red grouse is fond of dusting its plumage in dry and sandy spots. On more than one occasion has the writer, while traversing the moorlands in the peak of Derbyshire, surprised a small flock of grouse thus engaged, in a track or bye-road, and which, as he approached on horseback, leisurely took flight on whirling wing into the bordering covert of heather and vaccinium.

On the 12th of August grouse-shooting commences—in our opinion somewhat too early; for though the early-bred birds of the year are strong upon the wing, yet there are many broods, hatched late in April, which are by no means so vigorous, and which indeed have not attained their full dimensions, the lower margin of the breast-bone being yet in a cartilaginous condition, and the flesh deficient in true game flavour. On the 4th of September last, we sat to table with such a brace of grouse before us, shot on the Grampians. The back bone had its usual bitterness, but not in *haut gout*, and the pectoral muscles were too soft and pallid.

As a rule, the red grouse pair in January and breed in March; the nest, if we can so call it, is composed of twigs of heather, wiry moorland grass (often cotton grass*), sometimes intermixed with a few feathers, or a little coarse sheep's wool. Often in Derbyshire have we seen this rude bed, consisting merely of a small faggot of dried heath twigs, mixed, perhaps, with a few withered stems of grass. Sometimes this nest is placed under the deep covert of heather; but we have seen it amidst bilberry bushes, in patches of cotton grass, and occasionally in depressions surrounded by low herbage, such as wild thyme, etc., on the midway of the mountain side. On this rude bed the female deposits her eggs, varying from 8 or 10 to 14 or

* In the moorlands of Derbyshire, the cotton grass often grows in extensive patches, and, at a little distance, presents the appearance of a recent fall of snow-flakes, each flake adhering, plume-like, to the summit of a wiry bent or grass-stalk. The contrast with the heather is very pretty.



VARIETIES OF GROUSE.

16 in number; they are acutely oval, of a darkly clouded umber brown tint, having a greyish or reddish grey ground colour, largely smeared, blotched, and spotted with purplish umber, so that, except about the small end, little of the ground colour is fairly distinguishable. "The silent and secluded hours" of incubation belong exclusively to the female, but the male keeps his vigils around the spot, and as soon as the young brood emerges, joins his patient mate in assiduous attention to their mutual charge.

It is not improbable that the larvæ of insects and ants' eggs form at least a portion of the food of the young; to which, as we can testify, are added the fresh shoots of the heather, and the young leaves of the *vaccinium*. A learned ornithologist says, that the berries of the red and black whortle (red whortle berries and bilberries) with crow berries (*Empetrum nigrum*), are most frequently found in the crops of the young. These berries are August fruits, and therefore, how they are to be gathered in March, April, and May, is not very palpable. The crops of birds killed in August and early in September, are often gorged not only with bilberries, but also with the leaves of the shrub, and (in Scotch birds) with those of the trailing arbutus, or mountain strawberry-tree (*Arbutus alpina*), the black fruit of which furnishes an autumnal article of diet.

It is well known, in the case of the partridge,

that the male and female, which superintend the young covey with equal care and anxiety, put into practice many stratagems to deceive the intruder, and draw him away from the lurking-place of the brood; and not only so, but should danger be imminent, especially from the attack of some natural enemy, as the crow or the hawk, the parent birds will give battle, and fight with great determination. We cannot positively assert that the red grouse, in like manner, has recourse to artifice, or engages in conflict, for the protection of the young; but we have some reason to believe that such is its habit—a habit common, at least as it respects stratagem, to many species (as the lapwing); for on more than one occasion, while traversing the moorlands of Derbyshire in spring, have we roused up a single bird, which, instead of sweeping away to a distance, has taken but a short flight, and remained conspicuous, till we again approached, when it has again receded and settled. It is very probable that her brood were concealed somewhere near at hand, beneath the dense covert of heather. We are certain that the parents are strongly attached to their young, and that the female sits very closely and pertinaciously upon her eggs; so much so indeed, that an instance is on record of a female permitting herself to be lifted off her eggs, persisting to the last in her task of incubation.

During the whole of the summer, the young

coveys remain united under the guidance of the parents; and when, in autumn, the remorseless sportsman thins their numbers, the survivors, especially in districts where grouse are abundant, unite in large "packs," which, having learned the dear lesson of experience, become very wild, and give the sportsman no little trouble and fatigue, in approaching them within range of gun-shot; for they are now strong on the wing, soon take the alarm, and sweep away to a distant asylum. Thus, during the winter, do the grouse remain united in smaller or larger companies, till about the middle of January, when they separate and pair. By the middle of March the nest is prepared, and the female begins to deposit her eggs. Occasionally, however, young broods have been seen in March; but, on the other hand, it often happens that the work of incubation is not accomplished till the end of April or the beginning of May. The young, on exclusion from the egg, are covered with down, and are not fairly capable of flight until three or four weeks old; even then, and during several subsequent months, they trust rather to concealment than to the wing on any emergency, and lie close till the danger is over.

The red grouse of various districts differ much from each other, both as to weight and as to colour of plumage. For example, in the eastern parts of Scotland, the birds are dark in the general tone of the plumage, and are of large size, averaging in weight $24\frac{1}{2}$ ounces; while in the Hebrides the birds are paler, and perhaps somewhat inferior in weight. In North Wales, the grouse are large, but pale in colour. In Yorkshire, the birds are said to be generally smaller than those of Scotland; but if this be the case, it does not apply to those of the moorlands of Derbyshire, which, as far as we have seen, are large and dark, coloured with much of blackish umber on the breast. Mr. Selby informs us, that in Northumberland, varieties of a cream colour, or of different degrees of white, are often met with; and he adds that, in the moors of Blanchland, in the county of Durham, a cream-coloured or light grey variety, more or less spotted with dark brown and black, has existed for many years; but that, from the anxiety of sportsmen to procure specimens, these birds have not been allowed to increase, as in all probability they otherwise would have done.

Besides these varieties in the general tone of the colouring, there are others depending upon the season of the year, and upon age and sex.

Wild as is the red grouse, yet by judicious management, it may be so far domesticated in an aviary as to breed in captivity. In 1811, a pair of birds in the aviary of the late earl of Derby, at Knowsley, were thus productive; the female laying ten eggs, eight of which were hatched; but, from some unknown cause—probably want of suitable diet—the young birds soon died. In 1802, at Mr. Grierson's, Rathfarnham House, county of Dublin, a pair of grouse, which had been kept for three years, hatched a brood of young ones. Several similar instances are on record. This is the more surprising, as the partridge (although rendered tame without much difficulty when taken young, and especially in the case of birds reared from eggs hatched under poultry) is said never to breed in confinement.

It may please ornithologists to know that the writer was last year in possession of two pairs of partridges, one pair of which, owing to the desperate combats between the males, he was obliged to give away. The other pair, ordinarily kept in a small aviary, were let loose into a slip of a garden as spring came on, and secured every night in the aviary for fear of cats. Notwithstanding this annoyance, the female made a basin-like depression in a dense sage-bed, and there deposited twelve eggs, upon which she began to sit. The pair were now left to take their chance. Closely the female sat, and the male attended her, shrouded in a sage-bed; but, unfortunately, the cats did their work, and the writer, no little vexed, gave the disconsolate male to a friend. It was turned loose in a very large garden, and soon disappeared. These partridges were obtained from a friend at North Walsham, in Norfolk, who had kept them with pheasants in an aviary one spring and summer after their capture the previous year. Their wings, when in the writer's possession, were cut sufficiently to prevent their flying over the walls, but not so much as to prevent their rising to a trifling elevation. Had he netted them in, so as to secure them from cats, he might have seen the brood reared; but large nets are not easily obtained in a hurry, and the appearance of restraint might have stopped the whole proceeding; for they were very impatient of confinement in the little aviary. Had the writer been prepared for what ensued, the result would have been most certainly successful; but he was taken by surprise.

We trust that our reader will pardon this digression; if he be an ornithologist, we need not ask his forgiveness.

When we consider the vast quantities of red grouse exhibited for sale in the London markets, and reflect that in several other cities, and some large towns, a proportionate display is made; and again, when we take into consideration the consumption of grouse by the great land proprietors, and their friends in the moorlands, and the presents made by them, we may well feel astonished at the extent of slaughter committed—setting poachers aside—and be led, not unreasonably, to anticipate a time in which the red grouse will become extinct in our islands; the more so, as in many districts cultivation intrudes itself, not in narrow patches, but by bold advances, into tracts where the heather and the bilberry once held their domain. We ourselves know tracts on the borders of Derbyshire, now under cultivation, which, in our boyhood, were wild heaths, the abode of hundreds of pewits, and over which we have seen the grouse skim on rapid wings. They have been reclaimed by the hand of industry, and the birds have retired to a more congenial abode.

From time to time the public papers furnish us with extraordinary accounts of grouse-shooting. We read of thirty, forty, or even fifty brace of moor-game falling in one day to the gun of a single sportsman; but numerous sportsmen kill from six to ten brace in the day, and consider their success as only moderate. This work lasts from the early part of August to the close of November, when the packs are wild, and the heathy mountains become difficult; but the

slaughter continues, though in a diminished ratio, to the opening of March, when the females have begun to assume their spring livery, and are preparing to breed.

To counterbalance this destruction, we must take into account the fertility of the grouse, (from eight to fifteen eggs being laid in every nest,) and the strictness with which the birds are protected during the close season. After the autumnal and winter campaign against them, as soon as the spring and summer truce is granted, and tranquillity once more reigns over moor and mountain, the reparation of loss commences; but still they have to contend with, or rather to elude, their natural enemies, such as the polecat, the stoat, the eagle, and the larger hawks. Now, however, they find a friend and ally in the gamekeeper, whose gun, once raised against them, is levelled in their defence. It need not be said that his assiduous exertion in their behalf arises from selfish motives—his object is to see the moorlands well stocked in the ensuing autumn. This, however, is not always the case, for sometimes the breeding season is unpropitious, generally owing to heavy continuous rains, chilly winds, or to violent storms, which sweep over large districts, destroying, not only multitudes of newly-hatched birds, but even many adults. On the average, however, the annual equalization of the breed is maintained, especially in the Highlands of Scotland; but in North Wales, Derbyshire, Yorkshire, and perhaps throughout the border countries generally, grouse are less numerous than formerly, partly owing to the encroachments of cultivation on the moorlands, and partly to the facility for visiting the northern moors which is now afforded sportsmen by the railroad.

THE ADVENTURES OF A MAN OF SCIENCE.

In a former volume of the "Leisure Hour," we printed a brief memoir of Francis Arago, the great French astronomer and mathematician, to whom modern science owes so much, and on whose discovery of temporary magnetism is based the existence of the electric telegraph, which in a few hours brings us news from the seat of war in the East. That memoir touched but briefly on the events of the philosopher's youth, which was one of adventure and peril in the discharge of the duties of his profession. Of these adventures M. Arago has left behind him an autobiographical record, under the title of "History of my Youth." It is but a cursory review, penned from recollection after the lapse of years, yet it is full of interesting and instructive matter, and we feel that we need offer no apology to our readers for presenting them with a condensed summary of the facts which it relates.

When Arago was a mere boy, residing with his parents at Perpignan, an accidental meeting with a young officer of engineers, who had been a pupil of the Polytechnic School, determined him to the study of the higher branches of mathematics. He must have been possessed of extraordinary resolution and perseverance, and of faculties no less extraordinary for success in the pursuit which he chose thus early, and which he prosecuted with

undiminished ardour to the end of his life. With no other assistance than he derived from the advice of M. Raynal, a private gentleman versed in mathematics, with whom his family were acquainted, he made himself master, before he was sixteen years of age, of all the subjects contained in the programme for admission to the Polytechnic School. When the proper period arrived, he went with a companion to Toulouse for examination, at which he came off more than triumphant, and was placed by the examiner, M. Monge, first on the list.

Arago entered the Polytechnic School in 1803, his seventeenth year, and studied under the celebrated Legendre, whom he conciliated by his talent and independence. In his second year, he was appointed *chef de brigade*, had apartments in the residence of the hydrographer, Hatchette, and gained the friendship of the first professors of the college. Soon after this, M. Mechain, who had been sent to Spain to prolong the meridional line as far as Farmentera, died, and his son resigned the secretaryship at the Observatory. Arago was requested to fill the vacancy, and was introduced by his friend Poisson to the great Laplace, who loaded him with civilities. The heart of the young student bounded with joy when he dined with the great geometer, the author of the "*Mécanique Céleste*," in the Rue de Tournon; but he tells us naively that his veneration received a considerable shock when he heard the wife of the French Newton petitioning him that she might be *entrusted with the key of the sugar*. From this and similar traits we infer that the man who could weigh as in a balance the masses of Jupiter and Saturn, was not superior to the niggard parsimony and paltry jealousies of our own petty planet.

At the Observatory, Arago became the fellow-labourer of Biot in researches on the refraction of gases. While thus employed, the two submitted to Laplace a project for resuming the measurement interrupted by the death of Mechain, and were soon after appointed by government to prosecute that mission. They departed from Paris at the commencement of 1806, and immediately began their work. They found the old signals overthrown by storms, and endured great fatigues in traversing on foot the mountainous districts between Valencia and Catalonia and the kingdom of Arragon, in order to re-establish them. These toils were only varied by solitude for months together on the summit of a lofty peak, and the occasional society of a couple of Carthusian monks, who, in violation of the rules of their order, came to converse with them. Add to this, that their lives were often threatened by banditti, from whom the writer records several hair-breadth escapes—and some idea may be formed of the disagreeable romance of their position. During a great part of the time, Arago's companion, M. Biot, was laid up with a fever at Tarragon, and he had to prosecute his labours alone. The state of society in Spain at that time was as bad as it is possible to imagine; robbery and murder stalked abroad in the solitudes, assassins took refuge in the churches, where they defied the sword of justice, and the Romish priests, abandoned to party enmities and sensual indulgences, made a mock of religion.

M. Biot, on his recovery, rejoined Arago at Valencia, and both proceeded to Formentera, where they successfully accomplished the task they had undertaken. M. Biot then returned to Paris, and Arago remained to carry out the measurement through the islands of Majorca and Ivica. By this time war had broken out between France and Spain. Arago had fixed his station on the top of a high mountain in Majorca, and the populace, mad with hatred against everything French, chose to construe his scientific demonstrations into war signals and telegraphs to the French army. He was obliged to fly for his life in disguise. He was refused admission on board his own vessel by the captain, and narrowly escaped, not without a wound from a dagger, into the castle of Belver, as a prisoner. The governor of the prison, an eccentric personage, who appears to have discovered the merits of hydropathy forty years prior to Priessnitz, treated him kindly. One friend alone dared to visit him, and, to relieve the tedium of confinement, sent him the journals of the time as fast as they appeared. In one of these Arago read the account of his own execution as a spy, in which he was described as having submitted to his fate with becoming decency. The perusal of this paragraph convinced him that his death was resolved on, and he determined to attempt an escape. By the aid of his friend Rodriguez, he found means to embark in a frail fishing-boat, on the 28th of July, 1808, and, first touching at Cabrera, arrived at Algiers on the 3rd of August. Here the crew were refused permission to disembark, by one of the police, who was a Spaniard, and they had to fight for liberty to step ashore. Arago and his three companions in flight were hospitably received by the French consul, who furnished them with false passports, and procured them a passage in a vessel about to sail for Marseilles. The vessel left the port of Algiers on the 13th of August, and entered the Gulf of Lyons on the 16th. Here she unhappily fell in with a Spanish privateer, who took possession of her as a prize, under the pretence that she was violating the blockade raised by Spain on all the coasts of France. Looking from the cabin of the vessel, Arago recognised among the crew of the boat which had come to take possession of the prize, his old servant Pablo Blanco. He immediately got into bed and covered his head with the counterpane, lest Pablo should in turn recognise him, and betray him. The supposed prize was taken to Rosas, and the crew and passengers placed in quarantine in a dismantled windmill, the young philosopher fortunately escaping recognition by his old servant.

The captured vessel being richly laden, the Spanish authorities wished to declare it a lawful prize. They asserted that Arago was her proprietor, and began an examination, in order to get evidence of that fact, if possible; but the young fellow puzzled them so completely by the various dialects he spoke, that they were unable to fix his nationality, much less to identify him as owner, and they gave up the attempt as a bad job. Being in possession of a safe-conduct from the English Admiralty, Arago wrote to the captain of an English vessel at anchor in the roads, demanding his protection; the captain, however, refused to "mix himself up" in the affair, and left him to his fate.

Meanwhile, finding that the report of his being a Spanish deserter, and the owner of the prize, was gaining credit, he wrote to the commandant of the place, declaring himself to be a Frenchman, and proved the declaration by reference to his former servant Pablo Blanco. But that same day the commandant was superseded by an Irish colonel, and Arago still remained in quarantine.

When the term of quarantine had expired, the prisoners were removed to the fortress of Rosas, and Arago, with his friend M. Berthémie, were thrust into a casemate which was no better than a dungeon, and fed on rations of dry bread and rice, which latter they had no means of cooking. To obtain better food, he sold his watch for a fourth of its value, an act which, though it relieved his present necessities, not very long after plunged his family in sorrow. It happened that Arago's father, who, ignorant of the fate of his son, went in quest of news wherever Spaniards were to be found, saw in the hands of a soldier the watch he had given to him at parting, and at once concluding him to be dead, swooned on the spot.

Towards the end of September, the prisoners were removed from their casemate, to a citadel at the entrance of the roads, and cast into a dungeon which the light of day never penetrated: here they remained but a few weeks, when they were transported to the port of Palamos, where they were sheltered in a hulk, and allowed to go ashore and parade their rags and miseries in the town. In this place Arago made the acquaintance of the Dowager Duchess of Orleans, mother of Louis Philippe, who, being herself in poverty and exile, could offer him no better hospitality than a piece of sugared bread. That same evening a poor emigrant on his way to France, coming alongside the hulk in a boat, handed his snuff-box to Arago, desiring him to take a pinch. Within the box was an ounce of gold, which the prisoner took, replacing it with a few words addressed to his family, which happily reached them, and tended to relieve their anxiety on his account. It is worth noting, that the first use the prisoners made of the ounce of gold, was to regale themselves with an immense dish of potatoes.

But the hour of deliverance approached. While the crew and passengers of the captured vessel had been performing quarantine in the windmill, Arago had written to the Dey of Algiers, informing him of the illegal arrest of the vessel, and the death of one of the two lions which it contained, and which were sent by the Dey as a present to Napoleon. This last circumstance transported the African despot with rage. He sent immediately for the Spanish consul, claimed a round sum for the dead lion, and threatened war if the ship were not instantly released. Spain had, just then, too many irons in the fire to venture to entangle herself with new difficulties, and an order was immediately despatched to release the vessel so anxiously coveted.

On the receipt of this good news, Arago and his fellow prisoner made active preparations for their departure; and on the 28th of November 1808, they set sail, steering for Marseilles. Some Mussulmen on board declared that it was written above, that the vessel should not enter that town, and so it proved. No sooner were they in sight

of the port, than a violent squall from the north drove them out to sea, where they were blown about by storms for several days, and finally, when entirely ignorant of their course, landed, on the 5th of December, at Bougie, an almost deserted port three days' sail from Algiers.

Without money or friends at Bougie, it was necessary for the party to get to Algiers; but the passage was pronounced impossible by sea at that time of the year, and it was deemed so dangerous by land, on account of robbers, that the caid of the town refused them permission to attempt it. To overcome his opposition, Arago and M. Berthémie had to sign a document protesting that they had undertaken the journey in opposition to his will, and that he was not responsible for the result. They then bargained with a Mahomedan priest to guide them to Algiers for the sum of twenty piastres and a red mantle. They had themselves to assume the garb of Mussulmen, and then, first showing their guide that they had no money or valuables with them, so that if they were killed he would lose his reward, they set out, accompanied by an escort of Moorish sailors who were drawn from the crew of the ship. Arago had made friends with the remaining lion, and at his departure paid him a farewell visit.

The overland journey appears to have occupied nearly three weeks, during which the adventurers encountered a series of perils from wild beasts, wandering Kabyles or desert robbers, and the tribes inhabiting the villages through which they passed. Had they been recognised as Christians, they would infallibly have perished; and, as it was, their escape was accounted almost a miracle. When at length they arrived at Algiers, it was not believed that they had made the transit from Bougie, and even the dey himself was incredulous as to the fact, until it was confirmed by other evidence. They were cordially received by the French consul, and once more placed in comfort. Shortly after his arrival at Algiers, Arago recovered his instruments, which, with his luggage, had come round by sea.

To return to France, from which an untoward fate seemed to debar him, must naturally have been the dearest object of his wishes; but again an obstacle arose that detained him for several months on the African coast. The old dey had been put to death for the sole crime of want of energy in governing; and the new one, perhaps not wishing to figure in the same way, made a preposterous claim upon the French consul for a large sum of money, and, on the refusal of it, declared war against France. This act rendered Arago and his companion prisoners of war. They were not, however, placed in confinement, but allowed to go at large on parole. No active measures followed the declaration of war, but the port was closed against France for five months, during which time the young astronomer had leisure to make some observations on the social life of the Algerines. These are not remarkable either for their originality or depth, and would present nothing new to the generality of our readers were we to quote them.

The dey continuing obstinate in his demand, and the French consul as obstinate in his determination not to pay a cent, the trade with France

languished, and at length came to a stand-still. In this dilemma, one Bakri, an Algerine merchant, to save his vessels, which were in danger of confiscation if they touched the French shore, paid the sum demanded by the grasping dey. Permission to depart was instantly granted to the prisoners, and on the 21st of June, 1809, Arago once more set sail for Marseilles, in company with the French consul and his family. To amuse him, as he said, the consul gave him the whole of the letters which the inhabitants of the Balears had been writing to their friends on the continent, with directions to gather from them any political information that might be of service. Among them he found despatches from Admiral Collingwood, which were sent to the French minister of naval affairs; and he had the curious satisfaction in others of finding himself and his actions commented upon in a style not intended for his perusal or for the gratification of his self-love. On the 1st of July, when off Marseilles, they fell in with an English frigate, which came to debar their entrance, and whose captain ordered them to the Hyere Islands, to await the decision of Admiral Collingwood. They chose to disobey the order, and, escaping to the little island of Pomègue, arrived the next day at Marseilles, where Arago disembarked at the lazaretto. Thus had he arrived at home after being buffeted about for eleven months since his first departure from Algiers.

His family had long supposed him dead, and his letters from the lazaretto reached them like a voice from the tomb. The first news he received from Paris, was an epistle from the great Humboldt, condoling with his misfortunes and offering him his friendship. Then came M. Pons, the director of the Observatory at Marseilles, whose society lightened the tedium of quarantine. The moment he escaped from the lazaretto, Arago flew to the bosom of his family and the embrace of his mother, whose joy at his return can only be imagined. From his native town he proceeded to Paris, where he deposited his observations, which he had preserved through all his tribulations, at the Bureau of Longitude and the Academy of Sciences; and a few days after his arrival, on the 18th of September, 1809, he was nominated an Academician in the place of Lalande. He was then twenty-three years of age.

Although he had been nominated with a majority of forty-seven votes out of fifty-two, the jealousy of Laplace in favour of his pupil M. Poisson withstood his admission. Laplace first endeavoured to persuade him to wait until there was a vacancy also for M. Poisson, and finding that of no avail, then opposed him on the ground of non-qualification. This drew upon the great man the reproach of Lagrange, and others the oldest members of the Academy, and Laplace withdrew his opposition and even awarded Arago his vote on the day of election, an event which the latter records as a source of satisfaction after the lapse of forty-two years.

Shortly after his election, Arago was presented to the emperor, who had confirmed his nomination; but subsequently, on a frivolous pretence, he was ordered by the directors of the conscription either to furnish a substitute or to join the army in person. He resisted this petty tyranny, and

declared that if driven to extremity he would present himself among the conscripts in the costume of a member of the Institute, and in that garb would march on foot through Paris. The director, fearing the effect such a scene would produce on the emperor, withdrew his order.

Before the expiration of the year, Arago succeeded M. Monge in his professional chair, and with this honourable era of his life the adventures and the history of his youth may be said to have terminated. Of his subsequent career as an astronomer and a man of science we have treated elsewhere. It is known that in 1830, he became perpetual secretary to the Academy for the mathematical sciences, and that, in order efficiently to fulfil the functions of his office, he resigned his professorship in the Polytechnic School. He was a zealous worker, and discharged his duties to nearly the last day of his life. How much he honoured his country and benefited mankind by his unwearied investigations in the great volume of nature is best known to those who devote their lives to similar labours.

AN AUCTION IN AUSTRALIA, AND ITS CONSEQUENCES.

I HAD not been in Melbourne many weeks, when one morning, taking up the "Argus" newspaper at breakfast, my eye caught the following advertisement:—

"PRODIGIOUS! PRODIGIOUS!! PRODIGIOUS!!!

"Messrs. Z— & Co. are instructed to announce for sale by Auction the Important Township of TIPTON, in the parish of Mulgrave. It contains an extensive frontage to that enormous Avenue of traffic, the Great Dandenong Road. It is situated on a beautiful rise of ground, and supplied with a never-failing source of pure water. This favourite and beautiful locality offers to the enterprising trader and industrious storekeeper a number of noble frontages to one of the most crowded Roads in the Colony. The neighbouring scenery is beautiful beyond description. Trees of aromatic fragrance stud the country—

'Here peppermint embalms the air,
Wattle and gum are mingled there;
So wondrous wild, the whole might seem
The scenery of a fairy dream!'

With rapid strides the hand of civilization is levelling the mighty monarchs of the forest to the dust, and erecting in their place the future London of Victoria—the Emporium of our Commercial Greatness. The magic wand of the Auctioneer is to turn this sylvan district into a scene of industrial life, driving the feathered songster and the denizens of the wood to lament the 'auri sacra fames' which has tempted mercenary man to destroy their happy retreat, and to disturb the unfrequented wood with the less harmonious din of the blacksmith's forge, with a post-office with its hopes and fears, and with all the haunts of a new and important township! Within a short distance is the well-known Royal Hotel, etc., etc., etc."

"A capital chance!" exclaimed a friend, who had listened as I read it; and he told me many strange legends about the good city of Melbourne,

which he had heard—of fine sections bought for five-pound notes, which had turned out fortunes, and town allotments parted with by foolish colonists for bottles of rum, which had recently brought their thousands. There is something very attractive in the prospect of the sudden acquisition of wealth, but it is a dangerous allurements, and one that is apt to lead into a sinful course; but in 1853, Melbourne lived in an atmosphere of excitement. Sober trade was beside herself; shopkeepers were speculators, and merchants gamblers. Land-jobbing was the golden game that made nabobs of needy adventurers. All were eager to buy a bit of land; and men bought estates which they had only seen on paper, with as much unconcern as they would display in buying a pound of candles or a new jumper.

My friend having made up his mind to become a freeholder and citizen of Tipton, we attended the sale together. The room of the auction-mart was thronged. A large table in the centre was covered with champagne bottles: too impatient to draw the corks, the necks were broken off, and rough diggers and settlers from the bush were quaffing the sparkling beverage in huge bumpers. Trays, piled up with ham-and-beef sandwiches, tarts, and pasties, were handed round. As the bottles were emptied, the noise grew louder; but the attendants still brought in fresh supplies, anxious to drown the dictates of prudence, and excite a reckless spirit of competition in the minds of the buyers. Amidst the confusion of the scene the auctioneer mounted the rostrum. A long speech, during which more bottles were broken, set off, in rhetorical language, the scenic beauties and commercial advantages of Tipton. "You see, gentlemen," said he, in an off-hand manner, "the terms are very easy and liberal; one-third cash, and the remainder in six and twelve months. It comes recommended to you, gentlemen, with advantages which it only requires the eye of experience to detect; and now, gentlemen, favour me with a bidding if you please."

The attention of the company was here drawn to a gigantic paper plan, covering one side of the room, and showing the boundaries of the great city in embryo. Artists had been employed upon it; pretty sketches of the scenery decorated the border; railways, canals, hotels, schools, and churches, were depicted, as they were to be, in the future Tipton. The streets were laid out as became so important a town; and as it was to be the London of Victoria, there was the Strand and Holborn, Cheapside and Cornhill, upon the paper. Looking at the plan, the Cockney felt quite at home, and his interest in the new township seemed to be more deeply rivetted by these familiar names. The advertisement, the champagne, the speech of the auctioneer, and the pictorial plan, were allurements which required some courage to withstand. The bidding ran high and "spirited"—five, ten, twenty, thirty, fifty pounds were bid. Twenty voices spoke at once; the auctioneer, sharp as he was, could scarcely follow them. Eighty, ninety, one hundred pounds for an allotment twenty feet by fifty, in the rising township of Tipton. A few more magic touches of the auctioneer, and on the bidding goes. "Two hundred pounds; that's the way to say it," shouted a burly and excited

digger, and down the hammer dropped. As every succeeding lot was knocked down, the price decreased; the foolish digger was too far under the degrading influence of the champagne to see how he had been duped; but an unfeeling laugh went round, as lots, equally as good as the one for which he had paid two hundred pounds, were slowly got off at twenty pounds a piece. My friend, who, touched as he was with the land manna, had too much sense to be led into the champagne snare, waited patiently until the briskness of the competition had subsided, and purchased five allotments situated in Oxford-street, in the township of Tipton, for one hundred pounds.

Having become a freeholder, he was anxious to inspect his property. Mulgrave was twelve miles from Melbourne, by the map, and a good fifteen miles by the road. It was a day's excursion there and back; "but perhaps," said he, "we may get a lift on the way, and at any rate we could take a snug little dinner at the 'Royal.'"

We appointed a day and arranged to set off together by six o'clock in the morning, taking a few sandwiches with us, and making a day's ramble of it among the peppermint trees and aromatic vegetation of the beautiful district, by which the auctioneer had told us the delightful Tipton was approached. We were fortunate in our choice; the morning burst into existence with a bright and genial atmosphere, and a gentle breeze from the south promised to mollify the scorching effects of an Australian sun. By six o'clock we had breakfasted, and were on our way. We soon left Melbourne behind us, and were fairly in the bush. For the first four miles we got on tolerably well; but after that, finding a mere track in the bush, and no signs of those "crowded roads" of which the auctioneer had spoken, we were fearful that we had lost the way; fortunately we came upon a woodsplitter, who was disturbing the stillness of the solitude by the vigorous strokes of his axe. We inquired for Tipton. He had never heard of such a place.

"Which," we asked, "is the Great Dandenong Road?"

"The cart track you are on, is it," he replied.

Thus satisfied of our course, we pushed on merrily, stopping only now and then to listen to the uncouth mocking voice of the laughing jackass, which really seemed to be making fun of us; to admire the gaudy beauties of the love parrots, which looked like blossoms upon the trees, and to note the unobtrusive charms of the insects and flowers that strewed our path through the Australian wilds. We had stopped so often to admire these objects, and snatch as it were instruction on the way, and in admiring had so often forgot the object of our search, that mid-day had passed without our having obtained any sight of Tipton. We felt that we must have walked full fifteen miles; we had carefully kept to the cart track which distinguished the "Great" Dandenong Road; yet, the only human being with whom we had come in contact was the solitary woodsplitter. Can this, we asked each other, be the crowded road of commerce? No: we concluded that we had made a mistake, that we had followed the wrong track, and were on the point of retracing our steps when

we saw a horse and dray coming towards us. Our inquiries of the drayman were not more successful about Tipton. He knew nothing of it; but the "Royal," he said, was just before us.

We soon came up to a small wooden building, disfigured with outhouses and sheds, rudely constructed of bark. Very dirty, very lonely, and very miserable did it look, and with astonishment and dismay we beheld, painted on a board over the door, "THE ROYAL, BY PATRICK O'SULLIVAN." I must own we both looked very foolish; it was certainly mortifying to have come sixteen thousand miles to be duped: we, who boasted of our London acuteness, to be taken in by mere colonial trickery, was anything but gratifying to our self-esteem.

"Well, well, but this is not Tipton," said we to each other; "and after all, the hotel has very little to do with the township; let us go in and ask for directions."

The landlord, who combined the business of publican with that of a bush farmer, was very obliging in his way, and gave us what he, as a bushman, considered a very distinct direction.

"Go," said he, "straight on"—he did not say how far—"then turn off to the right"—he did not say when—"you will see a large gum-tree with the bark stripped off; go from that in a northerly direction for a quarter of a mile; you will then come to the Diamond Creek; cross over, and go straight on till you come to a water-hole; keep on the same track until you come to a dead horse, about fifty yards from which you will see a pole stuck up—that's Tipton!"

A dead horse and a pole, then, thought I, are the only remarkable features by which the fame of this commercial emporium, this renowned Tipton, is known to the settlers in Mulgrave. The glowing description of the auctioneer was disappearing like a dissolving view; and for a freeholder in an Australian township, my friend looked anything but a sanguine proprietor.

We were not easily disheartened, however; so we pushed on. Our track hitherto had been along the "Great" Dandenong Road; but leaving that, we found our way one of difficulties and perplexities: so rugged was the path, and so full of "crab-holes," hid by the dark and entangled jungle, that it was impossible to advance, otherwise than by slow and cautious steps. A forest of brushwood impeded our progress, and yawning gullies brought us every now and then to a dead halt. To seek a particular tree, where trees were so numerous, appeared almost a hopeless pursuit; but, by a vigilant and persevering search, we at last espied the barkless gum-tree, shining in its bleached and spotless nakedness, amidst the dark features of the surrounding foliage. Thus assured of our landmark, we soon came upon the Diamond Creek, a wide fissure in the rocky earth, with a tiny sluggish little stream washing its bed. Finding a narrow part, and leaping this—for the enterprise of the Tiptonites had not yet provided a bridge—we soon reached the water-hole, and the grim remains of the dead horse, and saw, reared amidst a wild and most uninviting scene, the pole, proclaiming it to be the new township of Tipton!

The surveyor and his men had certainly been there, and left some traces of their survey. Poles were stuck up to denote the various

streets and main arteries of traffic for the future town. Regent Street, however, was impassable by a gully, and Cornhill blocked up with gum-trees and brushwood. The greatest part of the Strand was covered with a lagoon, and could easily afford to the township that bountiful supply of water, which the auctioneer had praised so highly. The line of Oxford Street was broken by the circuitous course of the Diamond Creek. The township was not without its population; but it was a population that gave us no welcome. Kangaroos, opossums, and landicoots started from their hiding-places, and bounded along the main thoroughfares, astonished at our visit. The paroquets and cockatoos were chattering and shouting on the trees; snakes and lizards found pleasant retreats in the intricacies of Holborn; and the dingo and wild cat prowled about in search of unwary prey. Instead of a town growing into life, with its post-office, its stores, its public buildings, and commercial bustle—implied very forcibly, if not very definitely expressed, in the advertisement of the auctioneer—a wild and almost desolate appearance met the eye on every side. It possessed no charms for us, and we felt no disposition to disturb the kangaroo from his haunts, nor to drown the voice of the feathered songster, by any inharmonious din of mercenary pursuits.

Such was the much talked-of township of Tipton, in the parish of Mulgrave, in the golden colony of Victoria; and such was a fair sample of half the bush townships in Australia, "got up" by the cunning to entrap the "new chum," and delude him of his hard-earned savings. Dispirited, and thoroughly disgusted, we returned to the "Royal." The shades of evening were creeping on, and it would have been folly to have attempted to reach Melbourne that night. We were both so jaded and tired, that even the accommodations of a bush inn, miserable and uncleanly as they were, were preferable to a midnight tramp through the mazes of Mulgrave. At the "Royal" we had the usual bush fare. A billy of tea, plenty of damper, and baked mutton, afforded a bountiful if not a choice repast. Our chamber accommodations were less welcome: a wretched apartment, with a couple of stretchers, on which were blankets and sheets of no very cleanly hue, was all that the "Royal" hospitality could afford, and the mosquitoes and the fleas banished all hope of peaceful repose, and urged us to rise with the first dawn of returning day.

On our return to Melbourne, my friend, having only paid one-third of the purchase-money, expostulated upon the unfairness of the representations, and the hardship of the case, but totally without effect. There was no appeal; the style of the advertisement and the mode of sale were common enough and "quite colonial," and the law did not recognise any misdemeanor in the case. Many a poor fellow had sunk his hard earnings in Tipton. Diggers had worked and dug, sifted and washed, encountered dangers and suffered deprivations, for a few feet of that swampy lagoon in the new township. Many a new chum, who thought he had a fortune within his grasp, parted with his little store under the delusion of that rhetorical flourish, and that miserable snare of the bottle.

Many a bitter lesson was learnt, and many a repentant tear was shed, by the freeholders of Tipton, who not only felt that they had been snared and duped, but were sensible that they had become easy victims by encouraging within their minds an overweening desire for the sudden acquisition of wealth, and from not being prepared to resist the degrading fascinations of the bottle.

As a word at parting—if the intending emigrant will allow us to advise—let him curb, by a vigilant prudence, that strong desire to purchase land so prevalent among those who seek a home in a new country. There is a philosophy in waiting, for the absence of which no enterprise can compensate, and a caution essential, without which disasters will ensue that no industry can surmount. When, however, opportunity and prudence alike point to the purchase of land as advantageous, let him be careful to visit the sections before he bids, let him never allow himself to be ensnared into partaking of a champagne luncheon, and let him resolutely shut his ears to all the rhetorical blandishments of a Melbourne auctioneer. The custom of giving liquors before sales is not unknown in our own country, and ought to be discountenanced and put down.

SELF-EXAMINATION.

How were the secret devotions of the morning performed? Did I lay my scheme for the business of the day wisely and well? How did I read the Scripture, and any other devotional or practical piece, which I might afterwards conveniently review? Did it do my heart good, or was it a mere amusement? How have the other stated devotions of the day been attended, whether in the family or in public? Have I pursued the common business of the day with diligence and spirituality, doing everything in season, and with all convenient despatch, and as unto the Lord? What time have I lost this day, in the morning or the forenoon, in the afternoon or the evening? (for these divisions will assist your recollection;) and what has occasioned the loss of it? With what temper, and under what regulations, have the recreations of this day been pursued? Have I seen the hand of God in my mercies, health, cheerfulness, food, clothing, books, preservation in journeys, success of business, conversation, and kindness of friends, etc.? Have I seen it in afflictions, and particularly in little things which have a tendency to vex and disquiet me? And with regard to this interposition, have I received my comforts thankfully, and my afflictions submissively? How have I guarded against the temptations of the day, particularly against this or that temptation which I foresaw in the morning? Have I maintained a humble dependence on Divine influence? Have I lived by faith on the Son of God, and regarded Christ this day as my teacher and governor, my atonement and intercessor, my example and guardian, my strength and forerunner? Have I been looking forward to death and eternity this day, and considered myself as a probationer for heaven, and through grace an expectant of it? Have I governed my thoughts well, especially in such or such an interval of solitude? How was my subject of thought this day chosen, and how was it regarded? Have I governed my discourse well, in such and such company? Did I say nothing passionate, mischievous, slanderous, imprudent, impertinent? Has my heart this day been full of love to God, and to all mankind? And have I sought, and found, and improved opportunities of doing and of getting good? With what attention and improvement have I read the Scripture this evening? How was self-examination performed the last night? And how have I profited this day by any remarks I then made on former negligences and mistakes? With what temper did I then lie down and compose myself to sleep?—*Doddridge.*

Varities.

LIFE IN A MAN-OF-WAR.—Life in a man of war is an amusing phase of human existence. Here we had in the narrow limits of a corvette's deck a large assembly of seamen smoking, for it was the supper hour, and chatting eagerly about the Rooshins; a butcher in the act of most scientifically slaughtering a bullock; a party of marines about to land, undergoing inspection on deck, and with their loose serge frocks, dark trousers, and excellent arms and accoutrements, these capital fellows looked soldiers every inch. Just abaft the foremast, a group of officers, with every variety of pipe, from the proud meerschaum to the jet-black inch-and-a-half of clay, were telling us the tale of the Hango massacre. Close to them a man was staving in beef casks, and the brine from beef mort, and the blood from beef moribund, combining chemically with the dust and smut from the engines, made the deck look as if it would never be clean again. Still the very dirt and offal of a man-of-war, I must admit, is not devoid of a certain sense of duty, and flows in an orderly and regulation stream, with due respect for the officers' boots and breeches.—*Two Cruises with the Baltic Fleet.*

A SCEPTICAL young man, one day conversing with the celebrated Dr. Parr, observed that he would believe nothing that he did not understand. Dr. Parr replied, "Then, young man, your creed will be the shortest of any man's I know."

STUDY OF THE BIBLE.—Intense study of the Bible will keep any writer from being *vulgar* in point of style.—*Cotteridge's Table Talk.*

TRAVELLING AT THE ANTIPODES.—We have now two coaches every day to and from Ballarat—if coaches they may be called; for they are widely different from your notions of a coach. They have no springs, but they are hung on leather straps, so you are sure of being shaken well enough; nor have they any convenience for luggage—in fact, they are like a rough kind of open van. They carry about twelve persons, each of whom is allowed the liberal quantity of seven pounds of luggage; all excess in weight to be paid for. The distance is about sixty miles, at the outside, and the fare is £3. They manage to get through in one day, which is very well, considering the roads. In some parts you have to pass through the primitive forest; and it is no joke to drive four horses amongst the trees, winding about in every direction. In particularly muddy and dirty places the passengers have to get out and walk; but on the good parts the horses go at full gallop. About five miles of the road have been laid with planks placed close together, as an experiment. In dry weather it answers very well, but in wet it is slippery. There are several small towns growing up along the road, and good inns every few miles.—*Letter from Geelong.*

STABILITY OF WATER.—We cannot any longer sustain the ancient faith in the stability of the "terra firma," as contrasted with the ever-changing nature of the sea. Recent discoveries have proved, on the contrary, that the land changes and the waters are stable. The ocean maintains always the same level; but as, on the great continents, table-lands rise and prairies sink, so does the bottom of the sea rise and fall. In the South Sea this takes place alternately, at stated times. To such sinking portions of our earth belongs, among others, New Holland. So far from being a new young land, it is, on the contrary, with its strange flora, so unlike that of the rest of the world, and its odd and marvellous animals, an aged dying island, which the ocean is slowly burying inch by inch.—*Stray Leaves from the Book of Nature.*

CLOTHING.—Mr. Ewbank, in one of his mechanical essays, thus speaks of the miles of clothing that a person wears. He says: "In winter, a lady is unwrapped in a hundred miles of thread; she throws over her shoulders from thirty to fifty in a shawl. A gentleman winds from three to four miles around his neck, and uses four more in a pocket handkerchief; at night he throws off his clothing, and buries himself, like a larva, in four or five hundred miles of covered filaments."

A LUXURIOUS AFRICAN.—There is at Messrs. Taylor and Son's establishment, Bristol, a large and splendidly-wrought article in silver, executed for the palm oil merchant, Don Domingo Martinez, residing on the coast of Africa. This work, which is valued at £1800, is a large urn-shaped vessel, some three feet high, intended to contain cold water, for cooling the Don's chief apartment in the tropics. It is constructed so as to be used with a jet to sprinkle the water around.

STATISTICS OF ENGLISH AND FRENCH AGRICULTURE.—Some interesting statistics relative to the agriculture of France and England were given in a lecture delivered in Cornwall, by M. R. de la Trehonnias. In England, out of 50,000,000 acres cultivated, 10,000,000 are sown to wheat or other cereal crops, while in France 50,000,000 were cultivated for that purpose. The average growth of wheat per acre in England is 4 quarters, and in France only 1 3-5 quarter; while the produce of English land is about £3 4s. per acre, and that of France £1 12s. per acre. The number of sheep grown in each country is about 35,000,000, and the wool produced about 60,000 tons; but, owing to the difference in the acreage, there is something less than 1½ sheep per acre in England, and only about 4 of a sheep per acre in France. In France there are annually slaughtered 4,000,000 of cattle, the average weight of each being 2 cwt.; while in England there is not half the number slaughtered, but the average weight is 5 cwt.

BE JUST IN TRIFLES.—Nouschirvan, king of Persia, being hunting one day, became desirous of eating some of the venison in the field. Some of his attendants went to a neighbouring village, and took away a quantity of salt to season it; but the king, suspecting how they had acted, ordered that they should immediately go and pay for it. Then, turning to his attendants, he said: "This is a small matter in itself, but a great one as regards me, for a king ought ever to be just, because he is an example to his subjects, and if he swerve in trifles they will become dissolute. If I cannot make all my people just in the small things, I can at least show them that it is possible to be so."

PARIS FUEL SHOPS.—The fuel with which to cook a dinner in Paris costs nearly as much as the dinner itself. Fuel is very scarce, and the American is surprised to find shops all over the city, fitted up with shelves like those of shoe stores, upon which is stored wood, split up in pieces about the size of a man's finger, and done up in bundles, as matches were in the days of the tinder-box, steel, and flint: they are about the size of a bunch of asparagus. These little bundles sell at from two to six sous. Larger sticks are bundled up in the same way, and sell at a frightful price. Charcoal is sold by the weight, and hard coal, being nearly as expensive as wood, can be bought in the smallest quantity at any of these fuel shops. The windows of these shops are often decorated with a curtain or inside shutter, upon which "split wood" and "round wood" are printed, to represent the bundles sold within.—*Hunt's (New York) Merchants' Magazine.*

THE KINGS OF SIAM.—At a meeting of the Asiatic Society, the names of the chief King of Siam, and of his brother and subordinate prince, were submitted for election as honorary members. The claim of these royal personages consisted in their protection of the interests of science, and in their own personal attainments. The head king was a proficient in the Pali and Sanscrit languages; and had acquired a considerable acquaintance with Latin and English. The second king is stated by Sir John Bowring to speak and write English with ease and correctness. Both are astronomers, able to take an observation and work an eclipse; and the second king is also a chemist and mechanician. Both have written letters to her Majesty the Queen, in English, which are creditable performances. The head king has entered into a treaty of amity and commerce with this country, which gives Englishmen a right to hold and to be governed by their own laws in Siam, and grants other valuable privileges, thus opening up to our enterprise a country which has hardly been less shut to us than China itself. Their Majesties were unanimously elected.